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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/047,789	01/15/2002	Jin-Young Park	8836-147 (IB11125-US)	5610
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F. CHAU & ASSOCIATES, LLC 130 WOODBURY ROAD WOODBURY, NY 11797			EXAMINER KERVEROS, JAMES C	
			ART UNIT 2133	PAPER NUMBER

DATE MAILED: 01/04/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Applicati n No.

10/047,789

Applicant(s)

PARK, JIN-YOUNG

Examiner

JAMES C KERVEROS

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 20 August 2004.
- 2a) ☒ This action is FINAL. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-14 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-14 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 15 January 2002 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 3.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

1. This Office Action is in response to Amendment filed August 20, 2004, in reply to the Office Action dated May 17, 2004. Claims 1-14 are pending.

Objections to the drawings, specification and claims are hereby withdrawn in view of the amendments, as required by the Examiner in the prior Office Action of May 17, 2004.

Double Patenting

2. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claims 1-14 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-13 of U.S. Patent No. 6,769,084 by Kim et al. (hereinafter Kim). Although the conflicting claims are not identical, they are not patentably distinct from each other because the claimed invention is broader in scope, which encompass the claimed limitations recited in the U.S. Patent No. 6,769,084 by Kim.

Claims 1-13 of U.S. Patent No. 6,769,084 contains every element of claims 1-14 of the instant application and as such anticipates claims 1-14 of the instant application.

"A later patent claim is not patentably distinct from an earlier patent claim if the later claim is obvious over, or **anticipated by**, the earlier claim. In re Longi, 759 F.2d at 896, 225 USPQ at 651 (affirming a holding of obviousness-type double patenting because the claims at issue were obvious over claims in four prior art patents); In re Berg, 140 F.3d at 1437, 46 USPQ2d at 1233 (Fed. Cir. 1998) (affirming a holding of obviousness-type double patenting where a patent application claim to a genus is anticipated by a patent claim to a species within that genus). " **ELI LILLY AND COMPANY v BARR LABORATORIES, INC.**, United States Court of Appeals for the Federal Circuit, ON PETITION FOR REHEARING EN BANC (DECIDED: May 30, 2001).

Claim Rejections - 35 USC § 112

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1-14 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Independent claims 1 and 11, as amended, recite the limitation "producing test data based on data backgrounds associated with address bits and non-address", which

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renders the claim indefinite, because the terms "based" and "associated" do not clearly define the relationship of producing test data using data backgrounds with address bits.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1-14 are rejected under 35 U.S.C. 102(e) as being anticipated by Treuer (US 6694461) FILED: July 26, 1999.

Regarding independent Claims 1 and 11, Treuer discloses an apparatus and method for BIST (built-in self-test) circuit, including a Test Mode Controller (250) and Test Collars (231-235) as shown in (FIG. 2), comprising:

A controller (250) for controlling a self-testing operation of a memory chip (200) having memories (221-225) embedded in an integrated circuit (FIG. 2).

An address generator (WRITE ADDR GENERATOR, FIGS. 3 and 4) for generating pseudo-random address patterns using primitive polynomial-based pseudo-random bit-streams, under the control of the controller (250), also, see abstract.

A data generator (DATA GEN, FIGS. 3 and 5) for producing test data associated with data backgrounds of the address bits by utilizing the address values to generate data values (FIG. 8, step 802, also see abstract), which is under the control of the controller (250).

A comparator (DATA COMP, FIGS. 3 and 6) for comparing the test data, such as expected data values (FIG. 8, 804) which are generally the same as the data stored in memory, with the memory data output (READ DATA-OUT) from the memory chip to detect, a defect, if any, of the memory chip.

Regarding Claims 2, 10 and 12, Treuer discloses March algorithms, which read and write data in an up direction (incrementing address values) or in a down direction, such as a binary up-down counters or LFSRs registers for counting up or down the data backgrounds of the address bits in a single-order for generating an address. (Col. 1, lines 35-45 and Col. 11, lines 5-15).

Regarding Claims 3, 4, 7-9 and 13, Treuer discloses address generator (WRITE ADDR GENERATOR, FIGS. 3 and 4) including a plurality of linear feedback shift registers (LFSRs) (410, 420, FIG. 4) connected to each other for producing the pseudo-random address patterns, where the down-direction shift-register 420 is used as the down-direction address source and up-direction shift register 410 is used as the up-direction address source and where controller (250) controls the plurality of LFSRs (410, 420). The plurality of LFSRs further comprises a counter for counting the address bits to produce the pseudo-random address patterns, where the shift register 410 is replaced by a binary up-only counter (col. 11, lines 5-10).

Regarding Claim 5, 6 and 14, Treuer discloses a 4-bit version of a data generator (FIG. 5) comprising, a first multiplexer coupled to the address bits (TADR0-TADR3) and a ground voltage as input values and selecting one of the input values in response to a first control signal (USE-ADDR, EVEN or ODD) from the BIST controller (250) and a second multiplexer for selecting the test data bits (TDATA0-TDATA3) from the output of the first multiplexer, in response to a second control (POLARITY) signal from the controller, wherein the first control signal (USE-ADDR, EVEN or ODD) comprises a current data background of the address bits (TADR0-TADR3) and the second control (POLARITY) signal comprises a complemented data background of the address bits (TEXPECT0-TEXPECT3).

Response to Arguments

5. Applicant's arguments filed August 20, 2004 have been fully considered but they are not persuasive. Claims 1-14 are rejected under the obviousness-type double patenting over the claims of (US 6,769,084) by Kim, under 35 U.S.C. 112, second paragraph, and under 35 U.S.C. 102(e) as being anticipated by Treuer (US 6694461), as set forth in the present Office Action.

6. Applicant argues that Treuer fails to teach, suggest or anticipate "producing test data based on data backgrounds associated with the address bits and a non-address bit:" as claimed in Claims 1 and 11.

In response to Applicant's argument, clearly, Treuer discloses a data generator (DATA GEN, FIGS. 3 and 5) for producing test data utilizing the address values to generate data values (FIG. 8, step 802, also see abstract), which is under the control of

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the controller (250). The Applicant broadly recites data backgrounds associated with the address bits and a non-address bit, which can be interpreted as address values used to generate data values, regardless of these values being address and a non-address bit.

Furthermore, in view of the claims rejection under 35 U.S.C. 112, second paragraph, the terms "based" and "associated" do not clearly define the data backgrounds associated with the address bits and a non-address bit. Therefore, for examination purpose, the Examiner interprets the limitation of "producing test data based on data backgrounds associated with address bits and non-address" to imply generating test data using address values as disclosed by Treuer.

Conclusion

7. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

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the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to JAMES C KERVEROS whose telephone number is (571) 272-3824. The examiner can normally be reached on 9:00 AM TO 5:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Albert Decady can be reached on (571) 272-3819. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.


Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

U.S. PATENT OFFICE
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Date: 16 December 2004
Office Action: Final Rejection

By: 

JAMES C KERVEROS
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Art Unit 2133


Guy J. LAMARRE
PRIMARY EXAMINER